

What is claimed is:

1. A mask for screen printing including a positive pattern section and a negative pattern section with a mask material formed on said negative pattern section, for transferring a printing ink material to a substrate via openings of a mesh disposed at said positive pattern section, wherein:

said negative pattern section of said mesh selectively has a mesh opening ratio which is smaller than an opening ratio of said positive pattern section.

2. The mask according to claim 1, wherein a width of a gap, which is formed on said substrate by said negative pattern section, is not more than 40 μm .

3. The mask according to claim 1, wherein a plating layer is formed on said mesh of said negative pattern section.

4. The mask according to claim 3, wherein said plating layer has a thickness of 1 to 20 μm .

5. A mask for screen printing including a positive pattern section and a negative pattern section, for transferring a printing ink material to a substrate via openings of a mesh disposed at said positive pattern

section, wherein:

said negative pattern section has a mesh opening ratio of zero.

5 6. The mask according to claim 5, wherein a plating layer is formed on said mesh of said negative pattern section.

10 7. A method for producing a mask for screen printing including a positive pattern section and a negative pattern section with a mask material formed on said negative pattern section, for transferring a printing ink material to a substrate via openings of a mesh disposed at said positive pattern section, wherein:

15 a plating treatment is selectively applied beforehand to said mesh of said negative pattern section so that said negative pattern section has a mesh opening ratio which is smaller than an opening ratio of said positive pattern section.

20 8. The method for producing said mask according to claim 7, wherein at least a surface of both surfaces of a screen, on which a squeegee makes sliding movement, is polished after said plating treatment to give a flatness.

25 9. The method for producing said mask according to claim 7, wherein a plating mask material is formed before

said plating treatment on a surface of both surfaces of a screen, on which a squeegee makes sliding movement so that said plating layer is not formed on said surface.

5 10. The method for producing said mask according to claim 7, wherein said plating layer is composed of a material which has a hardness lower than that of said screen so that said plating layer is easily polished.

10 11. A circuit board comprising a pattern formed by screen printing, said pattern including at least one of a passive device such as a capacitor element and/or an active device such as an electromechanical conversion element, wherein:

15 a gap between said pattern is not more than 40 μm .

 12. The circuit board according to claim 11, wherein: if it is assumed that a plurality of patterns are formed in an aligned manner;

20 a difference between an average thickness of a pattern corresponding to a pattern assumed to be formed by an odd-numbered operation and an average thickness of a pattern corresponding to a pattern assumed to be formed by an even-numbered operation is not more than 5 % of an overall
25 average thickness.

 13. The circuit board according to claim 11, wherein:

said screen printing is performed by using a mask including a positive pattern section and a negative pattern section with a mask material formed on said negative pattern section, for transferring a printing ink material to a
5 substrate via openings of a mesh disposed at said positive pattern section, and wherein:

said negative pattern section of said mesh selectively has a mesh opening ratio which is smaller than an opening ratio of said positive pattern section.

10 14. The circuit board according to claim 13, wherein a plating layer is formed on said mesh of said negative pattern section of said mask.

15 15. The circuit board according to claim 14, wherein said plating layer has a thickness of 1 to 20 μm .

16. The circuit board according to claim 11, wherein said pattern is formed by one time of screen printing.